

REMARKS

Applicant replies to the Final Office Action dated March 25, 2008, within the shortened three month statutory period for reply. **Applicant requests an Advisory Action, if necessary.** Claims 1-6 were pending in the application and the Examiner rejects claims 1-4 and 6. Applicant thanks the Examiner for the indication of allowable subject matter in claim 5. Applicant amends claim 1 and cancels claims 6 without prejudice to filing one or more claims, with similar subject matter, in another application. Support for the amendments may be found in the originally-filed specification, claims, and figures. No new matter has been introduced by these amendments. Reconsideration of this application is respectfully requested.

Applicant thanks the Examiner for the indication that independent claim 5 is allowed.

The Examiner rejects claims 1 and 2 under 35 U.S.C. 103(a) as being obvious over Takano (USP 6,114,839) in view of Franklin (USP 5,240,022). Applicant respectfully traverses this rejection.

Applicant asserts that, in reply to the previous Office Action, claim 1 was amended to recite that the liquid detection section continuously detects infiltration or generation of a liquid inside a secondary battery. Applicant also argues that Takano does not disclose said feature. Furthermore, Applicant asserts that Franklin's disclosure of a water heater system is non-analogous art. More importantly, Applicant asserts that Franklin teaches away from "continuously" detecting, as recited in amended independent claim 1. Therefore, Applicant respectfully asserts that it is improper for the Examiner to combine Takano with Franklin in rejecting claim 1.

In the outstanding Office Action, Applicant asserts that the Examiner did not directly address the aforementioned arguments. Specifically, in the "*Response to Arguments*" section, the Examiner asserts that "Franklin teaches continuously monitoring a leak condition while it exists" (emphasis added, Office Action, page 6). Therefore, it would be obvious to one skilled in the art to modify Takano to include the teachings of Franklin because "continuously detecting infiltration or generation of liquid would have allowed the skilled artisan to reduce the probability that the liquid detection is merely a false alarm" (Office Action, page 6).

Applicant respectfully disagrees with the Examiner's argument. First, Applicant re-asserts that Applicant's previous arguments are significant, namely (1) Franklin not being a non-analogous art and (2) Franklin teaching away from the claimed invention. Therefore, one skilled

in the art would not have looked into Franklin for modifying Takano. Furthermore, Applicant asserts that the claimed invention recites the feature of detecting a leak condition, not monitoring a leak condition. Therefore, even if one were to look into Franklin, one would consider Franklin's teaching regarding detecting a leak condition. In that case, as previously argued, Franklin explicitly states that automatic shutoff valves that continuously monitor for leaks are not desirable and would lead to adverse effects within Franklin's system. As a result, one skilled in the art considering the disclosure of Franklin would not modify Takano's invention so that the liquid detection section continuously detects infiltration or generation of a liquid.

The Examiner rejects claim 6 as being obvious over Takano in view of Franklin and further in view of Darmawaskita. Applicant respectfully traverses this rejection.

Applicant cancelled claim 6, so this rejection is now moot. However, Applicant incorporated the elements of dependent claim 6 into independent claim 1, so Applicant will still address the Examiner's rejection. Amended independent claim 1 now recites the structure of the liquid detection section for achieving the result of continuously detecting infiltration or generation of liquid. Specifically, the Examiner states that Takano and Franklin do not disclose the liquid detection section, as recited in pending claim 6. However, the Examiner asserts that Darmawaskita discloses such liquid detection section.

Applicant respectfully disagrees. In particular, as argued in reply to the First Office Action dated November 8, 2004, Darmawaskita generally discloses an integrated circuit package for controlling the charging circuit of a battery charger. Specifically, Darmawaskita discloses a microcontroller that monitors "charging voltage and current, and temperature" (col. 5, lines 55-60). In other words, Darmawaskita discloses a method to "observe" (i.e., monitor) the charging voltage. However, Darmawaskita does not disclose a method to "identify" (i.e., detect) a liquid infiltration or generation of a liquid. Therefore, Darmawaskita does not disclose or contemplate a liquid detection section for continuously detecting infiltration or generation of a liquid, and thus, does not disclose "a liquid detection section that includes a comparator having a first input connected to a constant current source and one of the terminals, and a second input connected to a reference voltage source", as recited in independent claim 1.

Accordingly, Applicant asserts that neither Franklin, Takano, nor any combination thereof, disclose or contemplate at least the unique combination of elements in claim 1, namely:

- a liquid detection section for continuously detecting infiltration or generation of a liquid inside a secondary battery or inside a battery pack in which the secondary battery is installed;
- a control section for interrupting charging/discharging of the secondary battery in a case where a liquid is detected by the liquid detection section,
- wherein the liquid detection section controls the control section based on an impedance or resistance value detected between two electrically separated terminals,
- wherein an amount of an electrical current flowing through each of the terminals approaches zero, unless the liquid is detected by the liquid detection section,
- wherein the liquid detection section includes a comparator having a first input connected to a constant current source and one of the terminals, and a second input connected to a reference voltage source
- a liquid detection section that includes a comparator having a first input connected to a constant current source and one of the terminals, and a second input connected to a reference voltage source

Claims 2-4 variously depend from independent claim 1, so Applicants assert that claims 2-4 are differentiated from the cited references for at least the reasons set forth above, in addition to their own respective features.

The Examiner next rejects claims 3, 4 and 6 under 35 U.S.C. 103(a) as being obvious over Takano in view of Franklin and further in view of Darmawaskita (USP 6,184,659). Applicant respectfully traverses this rejection.

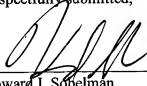
Claims 3 and 4 variously depend from independent claim 1. As noted above, Takano nor Franklin disclose or contemplate each feature of independent claim 1 and Darmawaskita does not disclose or contemplate the missing features. Thus, dependent claims 3 and 4 are differentiated from the cited references for at least the same reasons as above, as well as in view of their own respective features.

Claim 6 is cancelled, so the rejection of claim 6 is now moot.

In view of the above remarks, Applicant respectfully submits that all pending claims properly set forth that which Applicant regards as its invention and are allowable over the cited references. Accordingly, Applicant respectfully requests allowance of the pending claims. The Examiner is invited to telephone the undersigned at the Examiner's convenience, if that would

help further prosecution of the subject Application. The Commissioner is authorized to charge any fees due to Deposit Account No. 19-2814.

Respectfully submitted,



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